CLAIMS

What is claimed is:

1. A non-toxic, non-toxigenic, non-pathogenic recombinant *Fusarium* host cell of the section Discolor or a teleomorph or synonym thereof, comprising a nucleic acid sequence encoding a heterologous protein operably linked to a promoter.

2. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium bactridioides* cell.

3. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium cerealis* cell.

4. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium crookwellense* cell.

5. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium culmorum* cell.

6. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium graminearum* cell.

7. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium graminum* cell.

8. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium heterosporum* cell.

9. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium negundi* cell.

10. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium reticulatum* cell.

11. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium roseum* cell.

12. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium sambucinum* cell.

13. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium sarcochroum* cell.

14. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium sulphureum* cell.

15. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium trichothecioides* cell.

16. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium venenatum* cell.

17. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium venenatum Nirenberg sp. nov* cell.

18. The host cell of claim 1 in which the *Fusarium* host cell is a *Fusarium toruloseum* cell.

19. The host cell of claim 1 in which the *Fusarium* cell has the identifying characteristics of ATCC 20334.

20. A method for producing a heterologous protein which comprises

(a) culturing a non-toxic, non-toxigenic, non-pathogenic recombinant *Fusarium* host cell according to ~~claim 1~~ claim 20; and

(b) isolating the protein.

add a)

add B2)

ADD C17